

In the Claims:

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Please cancel claims 3-22 without prejudice or disclaimer.

Please add new claims 23-36 as follows:

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An isolated HIV envelope protein consisting of the amino acid sequence of SEQ ID NO: 1.

--23. An isolated HIV envelope protein or fragment thereof comprising a proline at a position corresponding to amino acid residue 313, a methionine at a position corresponding to amino acid residue 314 and a glutamine at a position corresponding to amino acid residue 325 of SEQ ID NO: 1, wherein the HIV envelope protein or fragment thereof containing the residues induces the production of a cross-reactive neutralizing anti-serum against multiple strains of HIV-1 *in vitro*.

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25. An isolated HIV envelope protein or fragment thereof comprising a V3 region having the amino acid sequence PMGPGRAFYTTGQ (SEQ ID NO: 24) or conservative amino acid substitutions at positions 3-9 of the amino acid sequence, wherein the HIV envelope protein or fragment thereof containing the residues induces the production of a cross-reactive neutralizing anti-serum against multiple strains of HIV-1 *in vitro*.

26. A recombinantly produced HIV envelope protein comprising a proline at a position corresponding to amino acid residue 313, a methionine at a position corresponding to amino acid residue 314 and a glutamine at a position corresponding to amino acid residue 325 of SEQ ID NO: 1, wherein the recombinantly produced HIV envelope protein induces the production of broadly cross-reactive neutralizing anti-serum against multiple strains of HIV-1 *in vitro*.

27. A recombinantly produced HIV envelope protein comprising a V3 region having the amino acid sequence PMGPGRAFYTTGQ (SEQ ID NO: 24) or conservative amino acid substitutions at positions 3-9 of the amino acid sequence, wherein the recombinantly produced HIV envelope protein induces the production of broadly cross-reactive neutralizing anti-serum against multiple strains of HIV-1 *in vitro*.

28. A peptide of about 13 to about 100 amino acid residues in length comprising the amino acid sequence PMGPGRAYTTGQ (SEQ ID NO: 24) or conservative amino acid substitutions at positions 3-9 of the amino acid sequence.

29. A peptide of claim 28, wherein the peptide is cyclic.

30. An HIV envelope protein fragment of claim 24 or 25, wherein the fragment is about 13 to about 100 amino acids in length.

31. An isolated HIV envelope protein, wherein the amino acid sequence of the envelope protein comprises at least about 95% sequence identity to SEQ ID NO: 1.

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32. An isolated HIV envelope protein wherein the amino acid sequence of the envelope protein comprises at least about 98% sequence identity to SEQ ID NO: 1.

33. An isolated HIV envelope protein, wherein the amino acid sequence of the envelope protein comprises at least about 99% sequence identity to SEQ ID NO: 1.

34. A vaccine composition comprising an isolated HIV-1 envelope protein or fragment thereof of any one of claims 2, 23, 24, 25, 26, 27 and 28 and a pharmaceutically acceptable carrier.

35. An immunogenic composition comprising an isolated HIV-1 envelope protein or fragment thereof of any one of claims 2, 23, 24, 25, 26, 27 and 28 and a pharmaceutically acceptable carrier.

36. A method of generating antibodies in a mammal comprising administering the HIV-1 envelope protein or fragment thereof of claims 2, 23, 24, 25, 26, 27 and 28 in an amount sufficient to induce the production of the antibodies.--